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GLOBAL OBSERVATIONS OF STRATOSPHERIC OZONE FROM UARS MLS

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We present. observations of ozone from the Microwave Limb Sounder (MLS) aboard the Upper Atmosphere Research Satellite (UARS) . Measurements now include three northern winters, and we describe the latitudinal and temporal changes between the three years . The northern mid-latitudes are of particular interest., given the substantial decrease in column ozone (above 100 hPa) observed between the 1992 and 1993 winters. 'l'his was primarily caused by a smaller rate of ozone increase during the early winter, with about. hal f of the changes in the ozone column arising from the 50 to 100 hPa region. In terms of interhemispheric differences, MLS observations for these past. years indicate that the ozone variations are substant ially larger in the northern mid-lat itudes than in the southern mid-latitudes. Year-Lo-year changes in temperature and ClO within the northern vortex are correlated with significant differences in ozone variat ions. Finally, the 1994 ozone behavior and its possible relation to the expected diminishing impact of heterogeneous reactions on volcanic! (Mt . Pinatubo) aerosols will be discussed.